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February 24, 1999

F/SW031:CRG

Lynda J. Roush
Arcata Field Office Manager
Bureau of Land Management
Arcata Resource Area
1695 Heindon Road
Arcata, California 95521-4573

Dear Ms. Roush,

Enclosed is the biological and conference opinion (Opinion) prepared by the National Marine Fisheries Service (NMFS) under section 7 of the Endangered Species Act (ESA) on issuance of four road rights-of-way to Pacific Lumber Company in association with federal acquisition of Headwaters Forest in Humboldt County, California.

The NMFS has concluded that the proposed activities are not likely to jeopardize the continued existence of threatened Southern Oregon/Northern California Coast (SONCC) coho salmon (*Oncorhynchus kisutch*), and/or Southern Oregon and California Coastal (SOCC) chinook salmon (*O. tshawytscha*) proposed for listing as threatened under the ESA. The NMFS has also concluded that the proposed activities are not likely to destroy or adversely modify proposed critical habitat for SONCC coho salmon or SOCC chinook salmon. With concurrence from NMFS, the conference opinion may be adopted as the biological opinion should the proposed SOCC chinook salmon be listed (as detailed in 50 CFR § 402.10 (d)).

If you have any specific questions, please contact Mr. Charles Glasgow at (707) 441-3521.

Sincerely,

William T. Hogarth, Ph.D.
Regional Administrator



Endangered Species Act - Section 7
Consultation

BIOLOGICAL OPINION
And
CONFERENCE OPINION

BLM Rights-of-Way Issuance to Pacific Lumber
Company, its Subsidiary and Affiliates in Headwaters
Forest

Agency: United States Department of the Interior, Bureau of
Land Management

Consultation Conducted By: National Marine Fisheries Service,
Southwest Region

Date Issued: _____

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ATTACHMENT 1 Biological Requirements and Status Under the 1999
Environmental Baseline: Southern Oregon/Northern
California Coasts Coho Salmon, Central California
Coast Coho Salmon, Central California Coast
Steelhead, Central Valley Steelhead, Southern
Oregon and California Coastal Chinook Salmon,
Central Valley Spring-Run Chinook Salmon, Central
Valley Fall-Run Chinook Salmon

I. Background

The National Marine Fisheries Service (NMFS) Southwest Region received a request for Endangered Species Act (ESA) section 7 consultation from the Bureau of Land Management (BLM), Arcata Resource Area, regarding the granting of four rights-of-way (ROW) to the Pacific Lumber Company, its subsidiary, and affiliates (hereafter referred to as The Pacific Lumber Company) as part of the Headwaters forest acquisition (February 10, 1999 letter and Biological Assessment [BA] to W. Hogarth, NMFS, from L. Roush, BLM). Previously, NMFS issued a biological opinion on the continued implementation of the BLM's Resource Management Plan (NMFS 1997), and this opinion anticipated additional project and program-specific ESA section 7 consultations.

The objective of this biological and conference opinion (Opinion) is to determine whether the granting of four ROW permits to The Pacific Lumber Company as described in the BA and summarized below is likely to jeopardize the continued existence of the threatened Southern Oregon/Northern California Coasts (SONCC) coho salmon (*Oncorhynchus kisutch*), and/or Southern Oregon and California Coastal (SOCC) chinook salmon (*O. tshawytscha*) proposed for listing as threatened under the ESA. This conference opinion addressing chinook salmon proposed for listing may be adopted as the biological opinion should the species be listed (as detailed in 50 CFR 402.10 (d)).

The Opinion also evaluates effects of the proposed action on listed and proposed Pacific salmonid habitat including proposed

critical habitat for SONCC coho and SOCC chinook salmon, and includes conclusions regarding destruction or adverse modification of proposed critical habitat.

The proposed action would occur within the North Fork Strong's Creek watershed, the Salmon Creek watershed, and the South Fork Elk River watershed, all in northern California. Coho salmon are known to occur in Strong's Creek, Salmon Creek, and Elk River (BLM ROW BA, BLM 1999).

II. Proposed Action

BLM proposes to grant four ROWs to PALCO. The four ROWs would provide reasonable access to PALCO for both timber hauling and administrative use across lands that will become federal property once the Headwaters Forest acquisition is complete. A map of the ROW locations was included in BLM's ROW BA (USDI-BLM 1999). The BLM will require The Pacific Lumber Company to adhere to a set of stipulations which includes road maintenance during periods when the road is used for commercial timber hauling operations. BLM will perform road maintenance when The Pacific Lumber Company is not using these roads for commercial hauling. The ROWs will be in effect into perpetuity as long as Pacific Lumber Company, Scotia Pacific, LLC and Salmon Creek Corporation (hereafter collectively referred to as PALCO for the purposes of the Section 10(a) permit) holds a valid ESA Section 10 permit.

Three ROWs (CACA 40307, 40307-01, and 40307-03) will permit access through the northern acquired lands in the South Fork Elk

River stream corridor and to PALCO lands surrounded by acquired BLM lands. The fourth ROW (CACA 40307-02) will permit access to the southern portion of the Headwaters Forest area which includes two road segments that will become federal land once the acquisition is complete. Each ROW is described below:

- 1) CACA 40307 is approximately 0.19 miles long and includes an existing stream crossing over the South Fork Elk River;
- 2) CACA 40307-01 is approximately 0.28 miles long and includes an existing stream crossing over the South Fork Elk River;
- 3) CACA 40307-02 is approximately 2 miles long and has recently been upgraded to improve drainage and decrease water diversion potential; and,
- 4) CACA 40307-03 is approximately 1.12 miles long and contains an existing stream crossing over the South Fork Elk River.

The stream crossings associated with the proposed ROWs may require upgrading in the future to meet Aquatic Conservation Strategy objectives (BLM 1999). The ROWs stipulate that design of any future stream crossing improvements must be approved by BLM.

III. Biological Information and Critical Habitat

The listing status, biological information, and proposed critical habitat for SONCC coho salmon and SOCC chinook salmon are described in Attachment 1.

IV. Evaluating Proposed Actions

The standards for determining jeopardy are set forth in Section 7(a)(2) of the ESA as defined by 50 C.F.R. Part 402 (the consultation regulations). The analysis necessary for application of these standards involves the following steps: (1) define the biological requirements of the listed and proposed Pacific salmonids; (2) evaluate the relevance of the environmental baseline to the species' current status; (3) determine the effects of the proposed or continuing action on listed and proposed Pacific salmonids; (4) determine whether the species can be expected to survive with an adequate potential for recovery under the effects of the proposed or continuing action, the environmental baseline and any cumulative effects, and considering measures for survival and recovery specific to other life stages; and (5) identify reasonable and prudent alternatives to a proposed or continuing action that is likely to jeopardize the continued existence of the listed and proposed Pacific salmonids.

A. Biological Requirements

The first step in the method NMFS uses for applying the ESA standards of sec 7 (a)(2) to listed and proposed Pacific salmonids is to define the species' biological requirements that

are most relevant to each consultation (Attachment 1). NMFS finds that these biological requirements are best expressed in terms of environmental factors that define properly functioning freshwater aquatic habitat necessary for the survival and recovery of SONCC coho salmon, and SOCC chinook salmon. Individual environmental factors include water quality, habitat access, physical habitat elements, river channel condition, and hydrology (Attachment 1). Properly functioning watersheds, where all of the individual factors operate together to provide healthy aquatic ecosystems, are also necessary for the survival and recovery of these species.

In general, SONCC coho salmon and SOCC chinook salmon biological requirements and associated aquatic habitat conditions necessary for survival and recovery are similar. Thus, the effects of the proposed project on aquatic habitat are therefore assumed to have similar effects on chinook salmon, where present, as on coho salmon. In this Opinion, references to SONCC coho biological requirements include those associated with SOCC chinook salmon.

B. Environmental Baseline

The current range-wide status of SONCC coho salmon and SOCC chinook salmon under the environmental baseline is described in Attachment 1. The biological requirements of the listed SONCC coho salmon and proposed SOCC chinook salmon are currently not being met under the environmental baseline in all geographic locations. Their status is such that there must be a significant improvement in the environmental conditions of habitat considered

to be critical to their long-term survival (over those currently available under the environmental baseline). Any further net, long-term degradation of these conditions would have a significant impact due to the amount of risk the listed and proposed Pacific salmonids presently face under the environmental baseline.

Environmental Baseline information specific to PALCO's ownership, and the BLM Headwaters Forest acquisitions is in the FWS-NMFS Biological and Conference Opinion Concerning the Issuance of an Incidental Take Permit for PALCO in Humboldt County, California (FWS 1-14-99-18, February 24, 1999 (PALCO HCP Biological/Conference Opinion)), hereby incorporated reference.

V. Analysis of Effects

A. Effects of Proposed Action

Road use for administrative purposes and commercial hauling along with stream crossing improvements can result in additional fine sediment transport to stream channels and, in turn, adversely affect listed and proposed Pacific salmonid habitat. To minimize the potential for sediment transport, rights-of-way permit stipulations are applied to road maintenance activities, and stream crossing design criteria.

Activities occurring on PALCO lands that are associated with the BLM ROWs can affect aquatic habitat in a variety of ways. For example, timber harvest and associated activities may cause

changes in the hydrologic regime, reduced large woody debris recruitment to stream channels, changes to water temperature regimes, and increased recruitment of fine sediment into streams. The effects of these actions are fully described and considered in the PALCO HCP Biological/Conference Opinion (February 1999).

B. Cumulative Effects

Cumulative effects are defined in 50 CFR 402.02 as "those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation." For the purposes of this analysis, the action area includes portions of BLM lands and PALCO ownership within the Strongs Creek watershed, Salmon Creek watershed, and North Fork Elk River watershed and downstream areas.

Cumulative effects in the action areas are discussed in the PALCO HCP Biological/Conference Opinion (February 1999). Future Federal actions, including land management activities, will be (or have been) reviewed through separate section 7 consultation processes.

VI. Conclusion

The NMFS has considered the effects of implementation of PALCO's HCP and NMFS' issuance of an associated ESA Section 10(a) Incidental Take Permit (NMFS 1999), including timber harvest activities on PALCO's ownership. As detailed in the PALCO HCP

Biological/Conference Opinion (February 1999), NMFS determined that implementation of PALCO's HCP, and NMFS issuance of the associated ESA Section 10(a) Incidental Take Permit, are not likely to jeopardize the continued existence of SONCC coho salmon and/or SOCC chinook salmon. Further, these actions are not likely to destroy or adversely modify proposed critical habitat for SONCC coho salmon or SOCC chinook salmon (PALCO HCP Biological/Conference Opinion (February 1999)).

Based on the available information, NMFS has determined that the BLM's issuance of the four ROW permits for The Pacific Lumber Company in the Headwaters Forest is not likely to jeopardize the continued existence of SONCC coho salmon and/or SOCC chinook salmon. The NMFS has also determined that issuance of the ROW permits are not likely to result in the destruction or adverse modification of habitat proposed as critical for both the survival and recovery of SONCC coho salmon and/or SOCC chinook salmon (i.e. the biological value of affected coho salmon habitat will not be appreciably diminished through time).

This determination is based on:

1. The understanding that adverse effects resulting from the ROWs will be minimized to the extent practicable through permit stipulations for stream crossing design, and road maintenance; and,
2. The expectation that all components of the PALCO HCP will be applied in the action area, and that implementation of the HCP

will result in improved aquatic habitat conditions through time (as discussed in the PALCO HCP Biological/Conference Opinion, February, 1999).

VII. Conservation Recommendations

Section 7 (a) (1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of the threatened and endangered species. Conservation recommendations are discretionary measures suggested to minimize or avoid adverse effects of a proposed action on listed species, to minimize or avoid adverse modification of critical habitat, or to develop additional information. NMFS believes that the ROW stipulations and HCP components are adequate, and that no additional conservation recommendations are needed for the BLM Headwaters Forest ROWs issued to The Pacific Lumber Company.

VIII. Reinitiation of Consultation

Consultation must be reinitiated if: 1) the amount or extent of taking specified in the Incidental Take Statement is exceeded, or is expected to be exceeded; 2) new information reveals effects of the action may affect listed species in a way not previously considered; 3) the action is modified in a way that causes an effect on listed species that was not previously considered; or, 4) a new species is listed or critical habitat is designated that may be affected by the action (50 CFR 402.16).

IX. References

Section 7(a)(2) of the ESA requires biological opinions to be based on "the best scientific and commercial data available." This section identifies the data used in developing this opinion.

Forest Ecosystem Management Assessment Team (FEMAT). 1993.

Forest ecosystem management: an ecological, economic, and social assessment report of the Forest Ecosystem Management Assessment Team. Forest Service, National Marine Fisheries Service, Bureau of Land Management, Fish and Wildlife Service, National Park Service, and Environmental Protection Agency. July.

National Marine Fisheries Service (NMFS). 1996. Factors for decline: A supplement to the notice of determination for west coast steelhead under the Endangered Species Act. National Marine Fisheries Service, Protected Species Branch, Portland, Oregon and Protected Species management Division, Long Beach, California. August.

National Marine Fisheries Service (NMFS). 1997. Biological and Conference Opinion on Implementation of Land and Resource Management Plans (USFS) and Land Use Planning Documents (BLM): USDA Forest Service: Klamath, Mendocino, Shasta-Trinity, and Six Rivers National Forests; USDI Bureau of Land Management: Arcata, Clear Lake, and Redding Resource Areas. National Marine Fisheries Service, Southwest Region. June 20.

National Marine Fisheries Service (NMFS), and U.S. Fish and Wildlife Service (USFWS). 1998. Endangered Species Consultation Handbook -- Procedures for Conducting Consultation and Conference Activities under Section 7 of the Endangered Species Act. March.

United States Department of the Interior, Bureau of Land Management (USDI-BLM). 1999. Biological Assessment for Two Rights-of-Way to Pacific Lumber Company in Headwaters Forest. Bureau of Land Management, Arcata Resource Area. February.

U.S. Fish and Wildlife Service and National Marine Fisheries Service. 1999. Biological and Conference Opinion Concerning the Issuance of an Incidental Take Permit for the Pacific Lumber Company, Scotia Pacific Company LLC, and Salmon Creek Corporation Property in Humboldt County, California. U.S. Fish and Wildlife Office, Coastal California Office, Arcata, and National Marine Fisheries Service, Southwest Region, Long Beach. February.

Incidental Take Statement

Incidental take is take of listed animal species that results from, but is not the purpose of, the Federal agency or applicant carrying out an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to, and not intended as part of, the agency action is not considered prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

An incidental take statement specifies the impact of any incidental taking of endangered or threatened species. It also provides reasonable and prudent measures that are necessary to minimize impacts and sets forth terms and conditions with which the action agency must comply in order to implement the reasonable and prudent measures.

The terms and conditions described below must be implemented by the action agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The BLM has a continuing duty to regulate the activity covered in this incidental take statement. If the BLM (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain the oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

A. Amount or Extent of the Take

NMFS anticipates that some actions which are fully consistent with BLM's mission and enabling legislation may still have more than a negligible likelihood to result in incidental take of listed coho salmon. This includes actions beneficial to the species over time. Incidental take associated with these types of projects is expected from detrimental effects on aquatic habitat parameters including substrate quality, turbidity, and suspended sediment levels, all of which may affect the life history of these fish.

Adverse effects of management actions such as these are largely unquantifiable in the short-term, and may not be measurable as long-term effects on the species' habitat or population levels. Therefore, even though NMFS expects some low level of incidental take to occur due to these actions, the best scientific and commercial data available are not sufficient to enable NMFS to estimate a specific amount of incidental take to the species themselves. In these instances, the NMFS designates the expected level of take as unquantifiable.

B. Effect of the Take

In this Opinion, NMFS has determined that the level of anticipated take associated with BLMs' issuance of four Rights-of-Way permits to The Pacific Lumber Company is not likely to result in jeopardy to the listed SONCC coho. Likewise, should the proposed SOCC chinook salmon be listed, the anticipated

levels of take for this species is not likely to result in jeopardy.

C. Reasonable and Prudent Measures and Terms and Conditions

The BLM Headwaters Forest ROW BA (BLM 1999) includes ROW stipulations designed to reduce adverse affects to aquatic habitat associated with ROW issuance. In addition, PALCO's HCP includes components designed to reduce adverse affects to aquatic habitat adjacent to, and downstream of, their activities. The NMFS has not identified Reasonable and Prudent Measures (or implementing Terms and Conditions) that are necessary to further reduce potential take of listed salmon species.